
DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposed Delisting of *Echinocereus engelmannii* Var. *purpureus* (Purple-Spined Hedgehog Cactus)**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to remove *Echinocereus engelmannii* var. *purpureus* (purple-spined hedgehog cactus) from the list of Endangered and Threatened Plants. This action is based on a review of all available data, which indicate that this plant is not a discrete taxonomic entity and does not meet the definition of a species as defined by the Endangered Species Act of 1973, as amended, and therefore, was listed in error. *Echinocereus engelmannii* var. *purpureus* is a sporadically occurring dark-colored and short-spined phase of *Echinocereus engelmannii* var. *chrysocentrus* localized in the Virgin River Basin of southwestern Utah. *Echinocereus engelmannii* var. *chrysocentrus* is common and has a broad distribution in the Mojave Desert of Arizona, California, Nevada, and Utah.

DATES: Comments from all interested parties must be received by March 20, 1989. Public hearing requests must be received by March 6, 1989.

ADDRESSES: Comments and materials concerning this proposal should be sent to the State Supervisor, Fish and Wildlife Enhancement, 1745 West 1700 South, Salt Lake City, Utah 84104. Comments and materials received will be available for public inspection, by appointment, during normal business hours the above address.

FOR FURTHER INFORMATION CONTACT: Larry England, botanist, at the above address (801/524-4430 or FTS 588-4430).

SUPPLEMENTARY INFORMATION: .

Background

Echinocereus engelmannii var. *purpureus* was described in the scientific literature in 1969 from specimens collected near St. George, Utah, in 1949 (Benson 1969). *E. e. purpureus* differs from *E. e. chrysocentrus* (see Benson 1982) largely by the characteristics of the lower descending central spine which is darker (all the central spines of *E. e. purpureus* are dark purple), shorter, and more slender in *E. e. purpureus*. *E. e. purpureus* was listed as endangered on October 11, 1979 (44 FR 58866). Since the Federal listing of *E. e. purpureus* as endangered in 1979, no populations of the taxon have been located. Individual plants exhibiting characteristics described for *E. e. purpureus* occur sporadically within the population of *E. e. chrysocentrus* in southwestern Utah (Woodbury and England 1988).

Woodbury and England (1988) demonstrated that many morphological variations occur within the population of *E. e. chrysocentrus* in southwestern Utah and that none of these variations exhibit and population integrity independent of *E. e. chrysocentrus* as described by Benson (1982) and Taylor (1985). Miller (1988) states that *E. e. purpureus* is a betalain color phase within the southwestern Utah population of *E. engelmannii* and may be of no more than horticultural interest. In the newly published "A Utah Flora," Welsh et al. (1987) reduces *E. e. purpureus* to synonymy with *E. e. chrysocentrus*. Field observations by Bureau of Land Management and Service biologists and botanists have confirmed the findings described above.

Summary of Factors Affecting the Species

50 CFR 424.11 requires that certain factors be considered before a species can be listed, reclassified, or delisted. These factors and their application to *Echinocereus engelmannii* (Parry) Lamaire var. *purpureus* L. Benson (purple-spined hedgehog cactus) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The purple-spined hedgehog cactus (*E. e. purpureus*) has been determined to be no more than a sporadically occurring vegetative phase, based primarily on spine characteristics, of *E. e. chrysocentrus*. *E. e. chrysocentrus* is a common species in the vegetative composition of the Mojave Desert in southwestern Utah (see Benson 1982, Cronquist et al. 1972, Welsh et al. 1987). *E. e. chrysocentrus*, which includes *E. e. purpureus*, is not

significantly threatened with destruction, modification, or curtailment of its habitat throughout a significant portion of its range. The final rule (44 FR 58866) designating *E. e. purpureus* as an endangered species identified the urban sprawl of St. George, Utah, as a threat contributing to the endangerment of that species. If *E. e. purpureus* were a valid taxon and met the definition of a "species" as described by the Endangered Species Act of 1973, as amended (Act), then this factor would be relevant. However, since the entity shows no population integrity independent of *E. e. chrysocentrus*, it cannot be scientifically defended as either a species, subspecies, or taxonomic variety.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Cylindrical cacti, in general, are of horticultural interest. However, *E. e. chrysocentrus*, which includes *E. e. purpureus*, is abundant enough throughout its range so as not to be jeopardized at present, or in the foreseeable future, by horticultural exploitation of its wild population. Here again, as stated above in Section A, if *E. e. purpureus* were a valid taxon, then this factor would be relevant.

C. *Disease or predation.* Disease or predation is not a threat to *E. e. chrysocentrus*, which includes *E. e. purpureus*.

D. *The inadequacy of existing regulatory mechanisms.* All native cacti are on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Convention). *E. e. var. purpureus* is included on Appendix I of the Convention. The Convention regulates and in some cases prohibits the export and international trade in species on its appendices. A recent law in Utah authorizes the Department of State Lands and Forestry to provide for protection of plant species designated as either threatened or endangered by the Federal Government under authority of the Act. The Bureau of Land Management, in its land use planning documents, has recognized the species and has provided guidelines for its conservation. This rule, if made final, will necessitate the reevaluation of *E. e. purpureus* in the context of its status on Appendix I of the Convention and in State and Federal land use planning documents.

E. *Other natural and manmade factors affecting its continued existence.* None known.

The regulations at 50 CFR 424.11(d) state that a species may be delisted if: (1) it becomes extinct, (2) it recovers, or

(3) the original classification data were in error. The Service believes current scientific information exists that demonstrates that *E. e. purpureus* does not represent a valid taxonomic entity and, therefore, does not meet the definition of "species" as defined in section 3(16) of the Act. Therefore, *Echinocereus engelmannii* var. *purpureus* was listed in error.

Effects of Rule

The proposed action would result in the removal of this species from the List of Endangered and Threatened Plants. Federal agencies would no longer be required to consult with the Secretary of the Interior to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of *E. e. var. purpureus*. There is no designated critical habitat for this species. Federal restrictions on taking this species would no longer apply. There are no specific preservation or management programs for the species that would be terminated.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions regarding any aspect of this proposal are hereby solicited from the public, other concerned governmental agencies, the scientific community, industry, or other interested parties. The Service particularly requests any evidence of populations of *Echinocereus engelmannii* whose individuals are plants referable only, or largely, to the variety *purpureus* as described in the scientific literature (Benson 1969, 1982; Taylor 1985).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in *Federal Register* on October 25, 1983 (49 FR 49244).

References Cited

- Benson, L. 1969. The cacti of the United States and Canada—new names and nomenclatural combinations. *Cactus & Succulent Journal* 41:124-128.
- Benson, L. 1982. The cacti of the United States and Canada. Stanford University Press, Stanford, California. 1044 pp.

- Cronquist, A., A.H. Holmgren, N.H. Holmgren, and J.L. Reveal. 1972. Intermountain flora—vascular plants of the intermountain west, U.S.A. Vol. 1. Hafner Publishing Co., New York, New York. 270 pp.
- Miller, J.M. 1988. Floral pigments and phylogeny in *Echinocereus* (Cactaceae). Systematic Botany 13(2): 173–183.
- Taylor, N.P. 1985. The genus *Echinocereus*. Timber Press, Portland, Oregon. 160pp.
- Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins. 1987. A Utah flora. Great Basin Naturalist. Memoirs, No. 9, Brigham Young University Press, Provo, Utah. 894 pp.
- Woodbury, L.A. and J.L. England. 1988. Morphological variation in the *Echinocereus engelmannii* population in southwestern Utah. Unpublished report, U.S. Fish and Wildlife Service, Salt Lake City, Utah. 4 pp.

Author

The author of this proposed rule is John L. England, botanist, U.S. Fish and Wildlife Service (see **ADDRESS** section above).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93–205, 87 Stat. 884; Pub. L. 94–359, 90 Stat. 911; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1225; Pub. L. 97–304, 96 Stat. 1411 (16 U.S.C. 1531 et seq.); Pub. L. 99–625, 100 Stat. 3500 (1986), unless otherwise noted.

§ 17.12 [Amended]

2. It is proposed to amend § 17.12(h) by removing the entry "*Echinocereus engelmannii* var. *purpureus* (purple-spined hedgehog cactus)" under "Cactaceae" from the List of Endangered and Threatened Plants.

Dated: December 22, 1988.

Becky Norton Dunlop,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 89–1269 Filed 1–18–89; 8:45 am]

BILLING CODE 4310–55–M